

# **Energy Division Data Request for Comments on the Revised Project Viability Calculator for use in the Utilities' Renewables Portfolio Standard (RPS) Solicitations**

## **Data Request Summary and Purpose**

Energy Division staff is finalizing its RPS project viability calculator (PVC) that uses standardized criteria to evaluate an RPS project's viability, relative to other RPS projects. Staff's revised PVC reflects input from parties presented in comments, reply comments and during workshop discussions. This Data Request is asking for comments on the final draft version of the PVC and several related questions.

Responses to this Data Request should be served, but not filed, to the R.08-08-009 service list by May 1, 2009. Next steps: staff will finalize the PVC and wait for guidance from the Commission on the extent to which the PVC will be used for the 2009 RPS solicitation and future solicitations.

## **Background**

On February 3, 2009, the Assigned Commissioner issued a ruling (ACR) in Rulemaking (R.) 08-08-009 regarding renewable energy development in the Imperial Valley. The ACR also addressed issues related to contract failure and the evaluation and weighting of project viability in the utility's RPS procurement process. The ACR included an Energy Division staff proposal for an RPS project viability calculator (see ACR, Attachment B). In response to the ACR, parties filed comments and reply comments, on February 27 and March 6, respectively. In their comments, the Independent Energy Producers Association (IEP) proposed a project viability calculator for parties and the Commission to consider, and Pacific Gas and Electric (PG&E), Southern California Edison (SCE) and San Diego Gas & Electric (SDG&E) filed modified versions of staff's PVC. In response to comments filed, Energy Division staff held a workshop on April 7, 2009, to discuss its proposed project viability criteria, alternative proposals by parties, and to identify areas of consensus.

## **Data Request**

### **Part A: Revised Project Viability Calculator (PVC.v3)**

- Review and comment on: 1) the Matrix of Proposed Criteria (Attachment A), 2) and the PVC criterion definitions and scoring guidelines (Refer to PVC.v3, "Criteria\_Scoring Guidelines" tab). Please provide a rationale for why each criterion should or should not be included in the PVC. Any proposed modifications should be justified and incorporated into the PVC and attached to your data response.
- Review and provide comments on Energy Division staff's PVC.v3 regarding its functionality and transparency.

Staff's revised project viability calculator (PVC.v3) may be downloaded here:  
<http://www.cpuc.ca.gov/PUC/energy/Renewables/hot/Project+Viability.htm>



## Part B: Questions

1. Staff proposes a scoring range from 0-10 for each criterion. Please comment whether you agree that this scoring methodology provides a sufficient amount of gradation to account for varying degrees of development risk, without purporting a false sense of accuracy. If not, explain why and propose an alternative methodology.
2. Staff and parties have proposed methodologies to weight the categories (e.g., developer experience, technology and project milestones), and/or, the specific criteria within each category (e.g., permitting or site control).<sup>1, 2</sup> At the workshop parties discussed what the *right* weighting for one category vs. another was. Staff agrees with parties that the relative weighting of the three project viability categories' is important for the PVC's effectiveness. However, rather than requiring a specific percentage weight for each category, the Commission may wish to provide the utilities guidance on the relative weights of the categories. For example, that from a project viability perspective, the development milestones category is more importance than developer experience, but less important than technology.
  - a. Please identify and provide a rationale for your preferred rank order of importance for the three project viability categories, which would then inform their relative weighting. For example, 1 = development milestones, 2 = technology and 3 = developer experience.
3. Parties and staff have explored the relationship between a project's price and its viability in three main areas. First, as a means of reducing the likelihood of future contract amendments through indexing; second, as a remedy to the assertion that some developers are bidding to be shortlisted rather than bidding their true development costs; and finally, to screen for projects with a bid price not high enough to generate sufficient revenues to be viable.

Staff believes that there is a relationship between price and project viability that should be considered in the utilities' procurement of renewable resources. That said, staff sees limited value in assessing project viability based on price, on a project specific basis, in the PVC. Rather, staff believes that it makes more sense to examine price, and the relationship between price and viability, in the least-cost, best-fit evaluation where the utility can examine the reasonableness of a project's price, relative to all other projects, by technology and other like characteristics.

- a. Please comment on whether you agree or disagree with this proposal. If you disagree, any proposed modifications should be justified and incorporated into the PVC and attached to your data response.
4. In its Staff Proposal for integrating project viability into the RPS procurement process, staff proposed that a project's project viability score would determine the level of development security.<sup>3</sup> The Union of Concerned Scientists (UCS), in its comments to the ACR, proposed that

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<sup>1</sup> The staff project viability calculator permits the user to adjust the weights for each category so that their total equals 100%. Refer to PVC.v3, "Calculation tab", cells D37, D41, D46.

<sup>2</sup> Staff's PVC permits the user to weight each criterion within categories by identifying its priority (e.g., very high, high, medium or low). Refer to PVC.v3, "Calculation tab", cells I34:I45.

<sup>3</sup> See February 3, 2009, ACR, Attachment B (R.08-08-009).

it may be more appropriate for development security to be added as a criterion for assessing project viability.<sup>4</sup>

- a. Please comment on whether you support UCS's proposal. Identify strengths and weakness of including development security as a criterion of project viability and propose how development security criterion should be incorporated into the PVC, if at all.
5. PG&E and SDG&E proposed methodologies that would result in adjustments to a project's PVC score, under certain conditions (Refer to Attachment A, and PG&E's and SDG&E's comments on the ACR).
  - a. Discuss the strengths and weaknesses of these proposals and whether they should be included in the PVC. Support of these proposals or other methodological modifications, should be justified and incorporated into the PVC, and attached to the data response.
6. The utilities' RPS solicitations permit proposals from all RPS-eligible resources and technologies, at any stage of commercialization. This presents a challenge for developing a PVC that can apply to all projects, without unduly rejecting emerging technologies. As an interim approach, until the commission has expressed a policy preference regarding the role of emerging technologies relative to commercial technologies, staff proposes that the a single PVC be applied to commercial and emerging technologies. Projects that score below a certain threshold in the technology category will then be separately grouped and evaluated against other projects in this group to determine relative viability.
  - a. Please comment on this proposal. If you disagree, please explain an alternative proposal for separately evaluating projects that would rely on emerging technology. Any proposed modifications should be justified and incorporated into the PVC and attached to your data response.

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<sup>4</sup> See February 27, 2009, Comments of The Union of Concerned Scientists (R.08-08-009)



## Attachment A

### MATRIX of PROPOSED CRITERIA for the RPS PROJECT VIABILITY CALCULATOR

The Matrix of Proposed Criteria lists project viability criteria proposed by parties and Energy Division staff. At this time, there are four proposals of a project viability calculator (PVC), and several recommendations for additional criteria to the PVC, in general (see Table A below). In the matrix, an "X" marks whether that criteria is included in that version of the PVC, and when necessary, the criteria's metric is given in parenthesis. The four proposed PVCs, and parties comments and reply comments to the February 3 ACR, may be downloaded on the Commission's website: <http://www.cpuc.ca.gov/PUC/energy/Renewables/hot/Project+Viability.htm>

#### Matrix of project viability criteria proposed by Energy Division, PG&E, SCE and IEP.

Category	Criteria	Energy Division	PG&E	IEP	SCE
DEVELOPER EXPERIENCE	Project Development Exp.	X (# of projects)	X (# of projects)	X (# of projects)	X (# of years)
	Ca. IOU Contracting Exp.				X
	Project Financing Exp.	X	X	X	X
	Facility Ownership Exp.	X*	X*		X
	Operations and Maintenance Exp.	X	X		X
	Eng., Procurement and Const. Exp.		X	X	

\* Both Energy Division's and PG&E's proposals merged Facility Ownership and O&M Experience into one category.

**Attachment A**

Category	Criteria	ED	PG&E	IEP	SCE
	Site Control	X	X	X	X
	Permitting	X	X	X	X
	Interconnection Progress	X (GIPR)	X (years)	X (GIPR)	X (CAISO, GIPR)
	Transmission Upgrade	X	X (scope of work)	X (lead time)	
	Major Equipment Procurement				X
	Project Development Lead Time				X
	Financing Risk of Technology or Project			X	
	Sponsor Creditworthiness			X	
	Pricing Structure				X (bid-price tied to cost index)
	Commercial Online Date	X			
<b>DEVELOPMENT MILESTONES (Project Viability)</b>					

# Attachment A

Category	Criteria	ED	PG&E	IEP	SCE
TECHNICAL VIABILITY	Technology Development	X (similar projects operating)	X (# projects operating)	X (MW in operation)	X (MW installed)
	Technical Design	X (e.g., supply chain constraints)	X (e.g., supply chain constraints)	X (viability verified)	
	Resource Quality	X (verified)		X (verified)	

Table A: Proposed criteria or methodologies not included in the Matrix

Criteria	Proposed by	Notes
Revenue Sufficiency	Green Power Institute	See Comments of Green Power Institute, p. 7 (2/27/09, R.08-08-009)
Concentration in RFO	SCE	See Comments of Southern California Edison, Appendix A (2/27/09, R.08-08-009)
Commercial Online Date	Sempra Generation	See Comments of Sempra Generation, pp 4-5 (2/27/09, R.08-08-009)
Methodology: Previous Experience w/ Bidder can impact Developer Experience category score	PG&E	See Comments of Pacific Gas and Electric, Appendix A (2/27/09, R.08-08-009)
Methodology: Limit overall score if fatal flaw identified in financing, site control or permitting	SDG&E	See Comments of SDG&E, pp. 14-15 (2/27/09, R.08-08-009)